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ABSTRACT

The initiatives taken by one school district to support professional development for principals in using data for school planning and reform were studied. A data-planning training model was developed in the San Francisco Unified School District (SFUSD) (California) to build skills principals need to read, interpret, and use multiple sources of data for school reform and continuous school improvement. The model was implemented with 17 middle school administrators in the SFUSD, and these administrators had the responsibility for teaching it to their staffs. Eleven of these principals responded to a survey about the model and the training, including workshops. Results of the survey suggest that administrators were actively using the data to plan and improve instruction. They seemed to understand the types of indicators to use when assessing achievement and improvements and they were able to read and use the accountability reports to find relevant information. Because middle school administrators found the data planning model helpful, it was extended to the elementary school level the following year. Three attachments illustrate the "data puzzle," a planning chart, and the use of the model to make a rubric for school portfolios. (Contains 2 tables, 2 figures, and 13 references.) (SLD)

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Supporting Data Use Among Administrators: Results from a Data Planning Model

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Introduction

Understanding and Use of Data by Teachers and Administrators

Researchers have learned much in recent years about how teachers view and use results from standardized tests of student achievement. For example, we know that teachers use these data very rarely to inform educational practice (Beck & Stetz, 1989; Salmon-Cox, 1981). In fact, while teachers report they feel pressure to improve test scores, they believe such scores are not particularly useful in helping to drive instruction in a positive way. In addition, teachers may not understand that improved test scores may not necessarily be attributable to improved classroom teaching but to the employment of focused test preparation strategies (Linn, Graue, & Sanders, 1989) or to changes in the demographic profile of students tested. They may not understand key terms like "Scale Score" or Normal Curve Equivalent. Nor do many teachers understand statistical concepts that inform the interpretation of data.

Research on how principals understand and use such data is much less understood, and few studies have systematically examined how principals use such data in decision-making (cf. Kennedy, 1984; Penuel, et. al., 1998). Comparative studies have found that in general, principals' knowledge of testing and assessment is somewhat higher than teachers' knowledge (Impara et al., 1993). At the same time, principals have historically not appeared to give particularly strong emphasis to the analysis of data. Glasman (1984) found that principals nominated by supervisors as the most effective in their district did not differ from principals nominated as the least effective in the extent to which they use such data either to improve student achievement or evaluate teacher performance.

As school districts across the country develop more structured accountability systems with high-stakes assessment tools driving such systems, there is increasing pressure on principals to understand and use such data to improve instruction in the school. While the effectiveness of such strong external accountability systems is by no means given (Corbett & Wilson, 1991) and there are no guarantees that improvements in instruction will result in higher test scores on norm-referenced standardized tests, principals' jobs increasingly depend on showing gains on such measures and on representing and interpreting those gains favorably to the broader school community and to district supervisors (Beck & Murphy, 1996).

Only recently have some broad expected competencies been articulated for educational administrators with respect to the use of assessment data. Impara and Plake (1996) identify the following tasks for administrators should be able to do with respect to the use of data:

1. using scores to decide on special program eligibility;
2. evaluating the school or system assessment program;
3. monitor student performance;
4. interpreting test scores for others;
5. developing curriculum that matches student performance to learning objectives;
6. develop intervention procedures to identify student and teacher strengths and weaknesses

Among the skills Impara and Blake (1996) list as critical to performing these tasks are: knowledge of terminology of standardized test reports, such as concepts like reliability and assessment; knowledge of how to reconcile conflicting assessment information about students; knowledge of measurement theory; and an ability to apply assessment/measurement in practice.

Given the current political and educational contexts faced by principals, it is important that researchers and administrators begin to work collaboratively to define and build competencies in the area of using assessment data (Cousins & Earl, 1992). This is important as there is evidence that in districts with strong accountability systems that readily use data such as test scores to plan and implement reform strategies, principals' willingness and ability to interpret and use data effectively is much greater (Penuel et. al, 1998). At the same time, this same research has identified critical gaps in training, namely, the need to help administrators test their own theories and strategies for school reform against evidence.

Current Research Objectives

In this paper, we explore one district's initiatives to support principal professional development for using data for school planning and reform. The goals of this paper are two-fold: (1) to describe a data-planning training model developed in the San Francisco Unified School District (SFUSD) which was designed to build the skills needed to read, interpret, and effectively use multiple sources of data for the purposes of school reform and continuous school improvement; and (2) describe the benefits of a data-planning model for supporting administrators in the planning and implementation process used to address academic achievement.

Accountability at San Francisco Unified School District

Accountability System

The Department of Program Evaluation and Research developed a data-planning training model to help support and strengthen the district's evolving accountability system. The primary objective of the accountability system at the SFUSD is to support data-driven decision making by school administrators and teachers to improve teaching and learning throughout the district. Underlying this objective is a belief that by analyzing student achievement data and collaboratively reflecting on data, school administrators and teachers can help schools meet the "learning imperative" to become successful schools that reach all children (Beck & Murphy, 1996). San Francisco's *data-planning model* begins with a process of analyzing current conditions at the school; that is, gaining a better understanding of how students are performing now and what their specific learning needs are. Schools then develop a *School Site Plan* for meeting those learning needs, implement those plans, and monitor their progress throughout the year. At the end of the year, each school participates in a district-wide process of evaluating their progress on site-specific goals and objectives and on meeting the district's goals and Superintendent's Priorities.

While many districts throughout the United States are moving toward using data to support decision-making, San Francisco's accountability plan is unique in the extent of training and support that is provided to administrators in this model and in the ways that data are analyzed. Principals throughout the district have all received training in understanding student test score data and each year develop a plan for their school based on previous' year's student achievement data. They identify specific gaps not only by subject area (such as reading or math) or by grade but also gaps in performance by ethnicity, grade, and program.

Supporting this data-driven decision making model is a comprehensive accountability system involving all stakeholders in the community. SFUSD's accountability system includes a comprehensive assessment program to measure student learning, a technology infrastructure to

support data collection and analysis, strategies for recognizing success and solving problems, and a training plan to show administrators and teachers how to use data to guide their planning, instruction, and organization.

Documents that Support Accountability

A major aspect of the accountability system is the production of resource documents available to every administrator. These documents provide information regarding student achievement indicators. These *School Accountability Reports* provide schools with disaggregated test score data to support decision-making. The Reports are used by different people in the district for different purposes. For a parent, the Reports might be used to track their school's performance or select a school for their child. For a district administrator, the profiles may be used to target assistance low-performing schools. For principals, the reports may be used to set school site priorities.

Academic Achievement Volumes present the results from the district-wide administration of the Comprehensive Tests of Basic Skills (CTBS). Using the Normal Curve Equivalent unit of measure, the report presents the mean performance scores and the mean gain scores of groups of students who have been in the school district for at least one school year i.e. they have test results from both the current year and the previous year. These results are disaggregated by grade, ethnicity and program (e.g. Special Education, Bilingual, Title I etc.).

The district also produces a document that measures performance of schools towards the District's six goals measured under 17 objectives called the *Goals and Objectives report*. Advancement towards the qualitative objectives on this report were measured through the production of a school portfolio and quantitative objectives were measured through achievement and other indicators. A research based report titled *Longitudinal Study of Attrition, Retention and Test Score Growth* is prepared pursuant to a Court order. The report is a longitudinal study following students over a period of four years to determine if they leave the District, drop out, change schools or are retained. The report also examines student performance on the standardized test over this period. The *Comprehensive School Improvement Program* (CSIP) uses data from the Goals & Objectives report and the Longitudinal study along with other indicators suggested by the State and the Court to help identify low performing schools.

The Pupil Services Department reports data on Suspensions and Expulsions. These data are disaggregated by ethnicity and offense type. Results are summarized in tabular and graphic form. The Health Services department administers a Youth Risk Behavior Survey every two years to middle and high school students. Departments share their results with administrators and teachers at professional development meetings.

Information Systems To Support Accountability

To support the production of these accountability documents, SFUSD has an extensive technological infrastructure that stores detailed records on students and staff. These records are in electronic form and can be accessed through a mainframe at the district's downtown offices. The detail and accessibility of these records allows the Department of Research, Planning, and Evaluation to produce "data-on-demand" for program administrators, principals, and central office administrators to support their decision-making.

Some special features of the information system include:

- Data for Multiple Measures of Student Achievement and Behavior: SFUSD maintains records not only for the CTBS/SAT-9, the district-wide assessment of student achievement,

but also for the SABE (a Spanish-language test of student achievement), GPA, the Brigrance (pre-K, K screening), and proficiency tests. For high schools, data are maintained on enrollment in algebra classes, honors classes, A-F classes, and AP classes. SAT and PSAT scores are also kept for each student. The district also maintains behavioral records for students, including attendance, suspensions, expulsions, retentions, and dropouts.

- **Disaggregation:** Disaggregating data is one of the primary functions of the Research, Planning, and Evaluation departments annual accountability reporting. Because detailed demographic data, including gender, ethnicity, free lunch status, LEP status, and home language are all kept in the central database, student achievement and behavioral data can be analyzed by breaking down scores by any of these variables. Such disaggregation is critical if schools are to target interventions to students who need the most help.
- **Comparability:** The district maintains records for several years for students, and longitudinal reports of two- and three-year trends are produced annually to track the long term growth of students. In these reports, those students for whom there are multiple years of records are tracked for their academic progress. The format of the annual reports is the same each year, allowing one to analyze changes in long-term trends.
- **Advanced Statistics:** The district's accountability reports do more than report descriptive statistics regarding test scores. The Research, Planning, and Evaluation Department has the capability to perform statistical tests to determine whether the changes over time are statistically significant. In addition, for program evaluation reports, the detailed demographic information available allows researchers to create matched comparison groups to measure more accurately the impact of programs.

Implementing a Data-Planning Training Model in San Francisco

Background & Objectives

Despite the efforts of administrative credential programs which attempt to provide some training in data analysis and statistics, the actual use of accountability reports as decision-making tools by district administrators remains limited due to the lack of understanding of these complex documents. Further, budgetary limits in districts leave little or no funds for further training in understanding and planning with the data. Therefore, most of the accountability reports that are produced by the district remain unused by their intended audience.

This dilemma became particularly salient among the administrators at SFUSD. Even though the District's Research, Planning and Evaluation Department was producing many sophisticated reports with summarized statistical information on multiple measures, they were not being used effectively as decision-making tools. Administrators found these reports to be cumbersome volumes of cryptic information that were difficult to understand, let alone useful models for curriculum planning.

The District developed a plan for more effective communication and training regarding the use of data for data driven decision-making which began with initial training sessions that instructed administrators how to use read, understand, and utilize the data. The District's emphasis on data driven decision-making made it a key objective and as a common expectation of all schools.

Methodology

In order to insure that administrators had the skills needed to design the data-planning portion of their school portfolio plans, a three-year data-planning model was designed in 1995-96 to assist all administrators with their understanding of how to reason and plan with data. The model employs a five step process, the first step of which is introduced in this training module:

Analyze

examining trends in test data, adding other sources of data to complete a portrait of the school's performance; explaining the data; identifying other data to back explanations

Plan

articulating the particular reform strategies being tried in the school; identifying the research or practice basis for these strategies

Implement

identifying what is to be done when and by whom

Monitor

identifying ways to document whether what was planned was actually implemented; setting benchmarks

Evaluate

testing assumptions and theories of reform against the evidence

This model was then implemented with 17 middle school administrators at SFUSD. The administrators then had the responsibility to teach it to their staff. The key elements of the model involved teaching administrators about disaggregating and summarizing data before analyzing data and developing an action plan for the school based on findings.

First, administrators were introduced to the extent of information available in the accountability reports which range from profiles filled with demographics to longitudinal studies tracking students over four years in terms of their mobility and academic performance on a standardized test. Next, the training included a discussion on the usefulness of disaggregation of the data in these accountability reports. These accountability reports disaggregate the information in various ways: by program, ethnicity, grade, gender, English proficiency, socio-economic status, etc. Such a breakdown of information is helpful for more specific understanding of strengths and weaknesses. For instance, through understanding how to analyze disaggregated data, middle school administrators were able to become more precise in stating a school priority. Administrators were also encouraged to collect their own data (quantitative or qualitative) related to parental involvement, school safety, school discipline, etc. Participants in the training were given tips on data collection methods that included keeping records of data through incident reports, classroom observations, opinion surveys, structured interviews, and longitudinal growth of the school. Administrators were further encouraged to compare their data

to that of a demographically equivalent school similar in ethnic distribution, school size and budget.

Last, the middle school administrators were instructed on how to create an action planning model. This involves reading and interpreting data, writing out measurable objectives, addressing research based reform strategies as activities and lastly, determining school priorities based on the information gathered from the data analysis.

The key points that were emphasized as administrators analyzed their data were as follows:

- (a) It is important to consider multiple sources of data when planning, standardized test scores alone do not provide the basis for adequate planning effort
- (b) Data planning involves fitting different pieces of data into a puzzle telling a complete story of what is going on in one's school.
- (c) It is important to remember that some data are contradictory. For example, while test scores may have risen, attendance may have dropped. Part of the role of an administrator is to make sense of these contradictions by giving a complete account of the data. The data do not speak for themselves. Administrators give it life and meaning by the story they tell about the data.
- (d) Data analysis in this involves generating explanations for why one sees patterns in the data. Data patterns are like the gist of the story. It is a summary from a variety of sources of data that captures what the data are about.

Administrators were asked to identify patterns in data (See Attachment A) and then to generate three explanations for each pattern. It was stated that the explanations should be consistent with the actual data present; the key explanation which articulated what was believed to be the root cause of the problem was then linked to the priority in the school and incorporated into the school site plan. In other words, administrators were told that school priorities should be the best explanations for patterns in data (See Attachment B).

Measurements

This training model has proven to be a major breakthrough in the usefulness of the accountability reports. Because of this training and the feedback provided by administrators, the department was able to improve the usability and accuracy of their reports. In analyzing the effectiveness of the data planning training model the following measures were used:

Data Planning Portfolio Scores: The ability to thoughtfully use data in developing district and site plans is a key objective under district Goal I: "to improve teaching and learning to enhance the academic achievement of all students." By 1996-97, through the school portfolio, the District began to measure the process school administrators were using to analyze and plan with data. A school was rated exemplary on a "data planning" objective if they demonstrated the use of multiple measures for data analysis, sharing of data with the school community, followed by reflection and determination of school site priorities based on data. Administrators were trained regarding the rubric that was used to measure performance on this objective.

As part of the portfolio process, school administrators were asked to gather, analyze and employ a variety of relative data for improved student achievement and program development. Central office administrators, site administrators and teachers were trained to score the objective in the portfolio. The process for paired scoring the portfolios was modeled the Bay Area School Reform Collaborative's model for school portfolios. The rubric (Attachment C) designed to measure the objectives classified schools on a scale of 1 to 9. Verbal descriptors used to categorize this variable were as follows: exemplary (score of 7, 8 or 9), satisfactory (score of 4, 5 or 6), and limited (score of 1, 2 or 3) evidence.

Professional Development Scores. This objective is also measured through the school portfolio. In order to be exemplary on this objective the school needs to provide clear evidence of staff participation in planning and implementing professional development activities at the school site. The professional development activities clearly focus on the impact on student achievement. Professional development addresses teaching strategies that meet the differentiated learning needs of the student population. Individual plans and records are maintained to show professional development for teachers. Reflection shows connection and impact on teaching practices and student learning.

CTBS Scores: The Comprehensive Tests of Basic Skills is the norm-referenced standardized test administered every year to Grades 2-11. The two sub-tests administered to students were Reading Comprehension and Mathematics Concepts and Applications.

Survey Questions: Middle school principals were asked to answer two basic questions:

- Has planning with data helped you to focus your resources more efficiently? If yes, could you briefly describe how?
- In your best judgement, to what extent has planning with data lead to academic achievement at your school?

Results of Data Planning Training Model

It was the hope of the Planning, Research, and Evaluation Department that due to the extensive data-planning workshops provided for three years to administrators, by 1997-98 the school's site plans would be a reflection of priorities that have resulted from data analysis. Of the 17 schools, that were measured on the objective stated as "to demonstrate the thoughtful use of data in developing district and site plans", a majority showed improvement.

Table1: Data Planning Portfolio Scores for Middle Schools

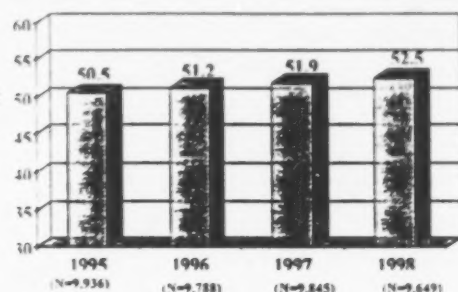
Rubric:	No. of Schools in 1996/97	No. of Schools in 1997/98
Exemplary Evidence	4	9
Satisfactory Evidence	3	2
Limited Evidence	10	5
No Evidence	0	1

A majority of the middle schools scored in the exemplary category on this objective in 1997-98 as compared to 1996-97 when the majority of school administrators provided limited evidence towards this objective, which is an indication that the workshop was a successful step towards the articulation of data.

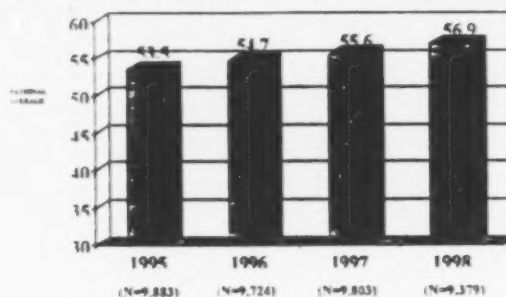
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Overall student performance at the middle school level showed continuous improvement in both Reading and Math for the 1996-97 and 1997-98 school years (see Chart 1 and 2). The percentage of students testing in the bottom quartile decreased. These statistics are particularly encouraging as students in the bottom quartile are the most academically at risk students and were now being addressed due to the disaggregation of data by quartiles. Another group that received attention due to the disaggregation of data were the African American and Latino students.

 Middle School District wide
Reading Performance 4-year Overview 



 Middle School District wide
Math Performance 4-year Overview 



In order to further understand the impact of the data-planning model on overall academic growth, Pearson product-moment correlation coefficient was computed between scores on the data-planning portfolio scores and test score gains from the CTBS testing. The gain was computed as the difference between the Spring 1997 and Spring 1998 CTBS test. The results are reported in Table 2:

Table 2: Correlation between portfolio scores and test score gains by school level.

School Level	Number of Schools	Correlation between Reading & DP Scores	p value	Correlation between Math & DP Scores	p value
Elementary	63	-.085	.51	-.107	.40
Middle	16	.423	.10	.368	.16
High	16	.127	.64	-.072	.79

As seen in Table 2, there was a moderate correlation between test score gains and portfolio scores on the data planning objective for middle schools—schools with higher data-planning portfolio scores tended to have higher test score gains. There was a zero correlation between the two variables at the other two school levels. None of the above correlations were significant at the .05 alpha level of significance.

Another interesting finding was that there is a significant correlation between scores on the data planning objective of the school portfolio and on the professional development objective of the school portfolio ($r = .71$, $p < .05$, $n = 103$). An inference that can be drawn is that schools that obtained high scores on the data-planning objective were simultaneously working with their

staff on developing data patterns, explanations for those patterns and reform strategies that would impact classroom instruction.

In order to further understand the ways in which the data-planning model has been used by administrators to improve the development of school site plans and, in turn, academic achievement, middle school principals were asked to answer two basic questions:

1. Has planning with data helped you to focus your resources more efficiently? If yes, could you briefly describe how?
2. In your best judgement, to what extent has planning with data lead to academic achievement at your school?

Of the 17 surveys sent out to principals, 11 were returned with responses. All 11 middle school principals believed that planning with data has helped them to focus their resources. Most were also able to articulate steps they took in this process—some paid particular attention to skills that were emphasized in the workshops such as the importance of disaggregation. For instance, in response to the question asking for a description of how planning with data has helped to focus resources more efficiently, one principal stated the following:

"teachers were able to identify grade level strengths and weaknesses as well as school wide strengths and weaknesses."

Another principal, also having understood the importance of disaggregating the data stated:

"we analyze data in order to determine where we will focus our resources and energies during the year. We look at the data from the school portfolio and then we review the data from the [Academic Achievement] Volume 3 with an emphasis on the academic achievement of the African-American and Latino students. Then as a staff we list how we will address our areas of weakness."

At the same time, principals were unable to provide clear "cause and effect" accounts of how data planning had effected academic achievement. Two of the principals, in response to how data-planning has lead to achievement at their school, described the achievement itself:

"Algebra readiness scores have improved, CTBS improved, suspensions are down, etc."

"Tutoring for bottom quartile over the last 4 years has shown that that quartile is becoming significantly smaller each year."

Although a cause and effect connection between data-planning and achievement was not provided, these two examples, we argue, are evidence that principals are aware of different indicators of student improvement and are aware of how to find, read, and interpret the data.

Similarly, in response to the 2nd question, eight of the 11 principals also did not provide a connection between *how* data-planning was related to achievement, but rather described data-planning as being helpful for allocating resources, for example:

"By identifying our needs more clearly, our decision making process was enhanced and our resources can be expended in a more targeted manner."

"Data has provided an impetus for conversation and discussion with the school's stakeholders: teachers, parents, students. It has also provided information as to where we need to focus our attention."

Only one principal was able to clearly articulate a connection between data-planning and achievement. He states,

"our school was reconstituted in 1994...the decision on how curriculum design would best meet the needs of the students was based on data and research. With this philosophy on decision-making, the school is now matching [similar schools] in academic

achievement. The significant gains in academic achievement would not have been possible without the use of data."

Overall, results of the survey suggest that administrators are actively using data to plan and improve instruction. They seem to understand what types of indicators to look for when assessing achievement and improvements at their school sites and how to use and read the accountability reports to find relevant information.

Discussion and Implications

Several *benefits* have emerged from the data-planning model:

- The delineation of the data-planning model has been a strong educational tool in training administrators to read, understand, interpret and discuss data.
- Administrators both in and outside the District now have knowledge on the process and data considered when planning, implementing, and evaluating their site plans.
- Using a systematic approach to analyzing data has assisted school reform by highlighting the strengths and weaknesses in educational interventions.
- The overall level of concern with accountability and meeting the central objectives of the District is increasing.
- The District is benefiting from having a common framework for viewing data. This is allowing administrators to make more informed decisions and plan using data.
- Analysis of data has assisted in the communication between administrators and teachers and has helped focus the professional development of teachers.

Extension of the data-planning model among elementary school level administrators was conducted in 1998-99. Further, a whole workshop to improve instruction with criterion referenced scores from a standardized test was designed for teachers. This assisted in extending the model to teachers and their use of data. Teachers were asked to study the summary data on the criterion-referenced scores of the SAT-9. On identifying the content clusters that needed attention, teachers were provided with the "Reviewer's Edition", a guide for planning classroom instruction printed by the publisher. Teachers were asked to identify linguistic and conceptual challenges towards the standard or content cluster that needed attention.

In *discussing* some of the findings of this study, it was seen that there is a difference between the school levels in their correlations between their data planning portfolio scores and test score gains. This difference can be attributable to differences between interpretive frameworks of elementary and middle school principals. Glasman (1984) found that middle school principals on the whole used test score data in decision making more than did elementary school principals.

The responses received to the survey question, "to what extent has planning with data lead to academic achievement," followed a similar pattern to that of a study conducted by Penuel et. al. (1998) when principals were asked to describe reasons (or provide data) for why their school's test had increased or declined, most were unsuccessful in matching reasons to conclusions. In fact, many principals did not distinguish between cause and effect at all, or attributed a decline in test scores to positive programs in the school.

Limitations: Technical limitations to the current study are the small and unequal sample sizes and the external validity of the study. The study describes the process and findings in a District and is not generalizable to other Districts. Limitations in the delineation of the data-planning process involved gaps in the articulation and delivery of the model with school staff,

and the role that analyzing data had in the determination of school site priorities. Alkin and Stecher (1983) found that tests and evaluation data were not among the top four sources of information: most decision makers relied on beliefs and opinions, program requirements and budgets and to a lesser extent direct observation and parent input (see also Glasman, 1984).

Next Steps: In order to fill in the gaps regarding the process by which administrators reason with and use data, the two attachments A & B have become part of every school site plan and will be analyzed for all schools. Further, the school portfolio process will be replaced by interviews with principals with regards to the following questions: What types of data has your school analyzed and used? How is it used? What are your school priorities and how are they related to your school's analysis of data? How have your priorities changed over the past three years and why? Show some examples of ways staff use data to improve teaching and learning school-wide. Therefore, the data-planning process will involve interview protocols for use with principals and videotape planning sessions among principals and between principals and teachers as they go through the process of identifying patterns and setting school site priorities.

Future research by our research team will not only broaden the scope of the study but will also involve collecting more ethnographic information on how principals reason in context.

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(Administrators were instructed to delineate and record patterns of data using each of the shown sources of data)

**SUPERINTENDENT'S
PRIORITY**

IMPROVE TEST SCORES OF LATINO, AFRICAN
AMERICAN, AND ILL. STUDENTS)



THE DATA PUZZLE

CTBS
Results



Standards
Iwa-Science



Qualitative Measures



Other Data



Other Quantitative Results



(Administrators were then instructed to determine the most salient data patterns and to determine possible reasons why these patterns exist.)

ATTACHMENT B

DATA PATTERN	REASON	PRIORITY	ACTIVITY (REFORM STRATEGY)	MEASURES
			Basis:	
			Basis:	
			Basis:	

Rubric for School Portfolios: The Use of Data for Planning School: _____

General Topics	Exemplary Evidence	Satisfactory Evidence	Limited Evidence
I. Multiple Measures, Variety of Data	▣ A. Data analysis addresses alternative assessment tasks including Math performance tasks ▣ B. Connections are made between two or more types of data. ▣ C. Evidence includes summaries and analysis. ▣ D. Pre-post, long-term, data analysis is included. ▣ E. Analysis is related to targeted student groups such as AA, L, ELL, GATE	▣ A. Data and analysis include disaggregated standardized test information. ▣ B. Variety of data includes at least one of the following: observations, surveys, grades, records. ▣ C. Evidence includes data description, reports, tools. ▣ D. Longitudinal data information is included. ▣ E. Data shown is related to targeted groups including all quartiles	▣ A. Limited evidence of data analysis of disaggregated standardized test information. ▣ B. A variety of data types is not in evidence. ▣ C. Evidence may not include actual instruments used or summaries/ results. ▣ D. Limited evidence of longitudinal data being used. ▣ E. Data is not specifically focused on target student populations.
II. Participation in Collection and Analysis of Data	▣ A. Evidence shows staff participation in analysis of school and individual student data. ▣ B. Evidence shows parent and/or student participation in analysis of data. ▣ C. Staff uses analysis of data to shape and modify programs and strategies to meet student needs.	▣ A. Evidence shows staff participation in collection of school data. ▣ B. Evidence of others involved in data collection including parents and students. ▣ C. Process for analysis of student data is shown	▣ A. Limited evidence of staff involvement in collaboration and analysis of data ▣ B. Limited evidence of involvement of other stakeholders in data collection and analysis. ▣ C. Process of analyzing data is not evident
III. Alignment of Data with District Objectives	▣ A. Analysis of data is aligned with content areas and site activities. ▣ B. Connections are shown through data analysis aligned with school program activities. ▣ C. Evidence shows analysis of student work/ learning.	▣ A. Analysis of data is aligned with site priorities. ▣ B. Data results and analysis match activities in site plan. ▣ C. Data analysis focuses on student learning.	▣ A. Evidence of data connected to site priorities not clearly shown. ▣ B. Limited evidence of data analysis connected to site plan activities. ▣ C. Limited evidence of data connected to student work.
IV. Reflection- Making Connections	▣ A. Parents use data to make plans and decisions. ▣ B. Teachers use data to adjust classroom strategies and instructional practices. ▣ C. Staff shows evidence of analysis and reflective practices in use of data to make decisions related to school programs.	▣ A. Use of data is reflected in parent and community activities. ▣ B. School programs and classroom planning may be modified based on analysis of data. ▣ C. Evidence of reflection based on data and results of analysis.	▣ A. Limited evidence of parent involvement in use of data. ▣ B. School programs and classroom activities show no revision or modification based on analysis of data. ▣ C. Limited evidence of school reflection on data and analysis